

FIG.1

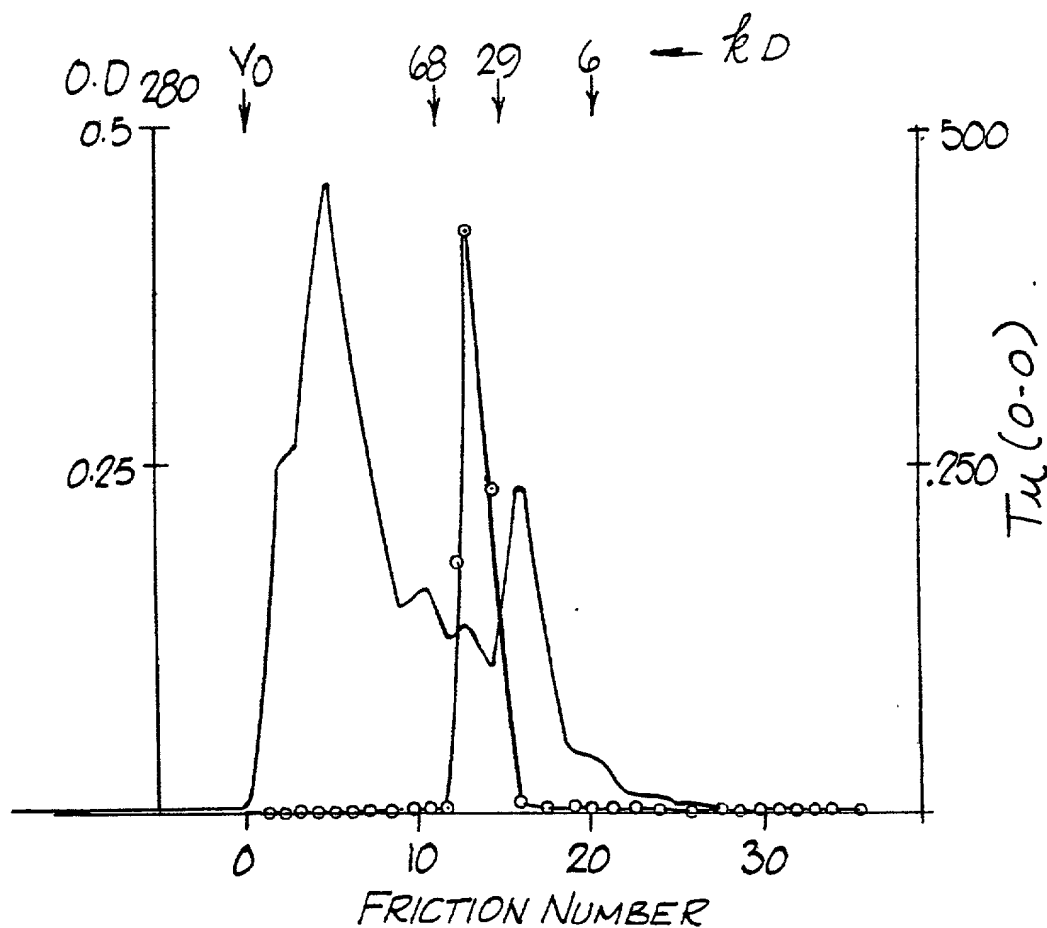


FIG. 2

3

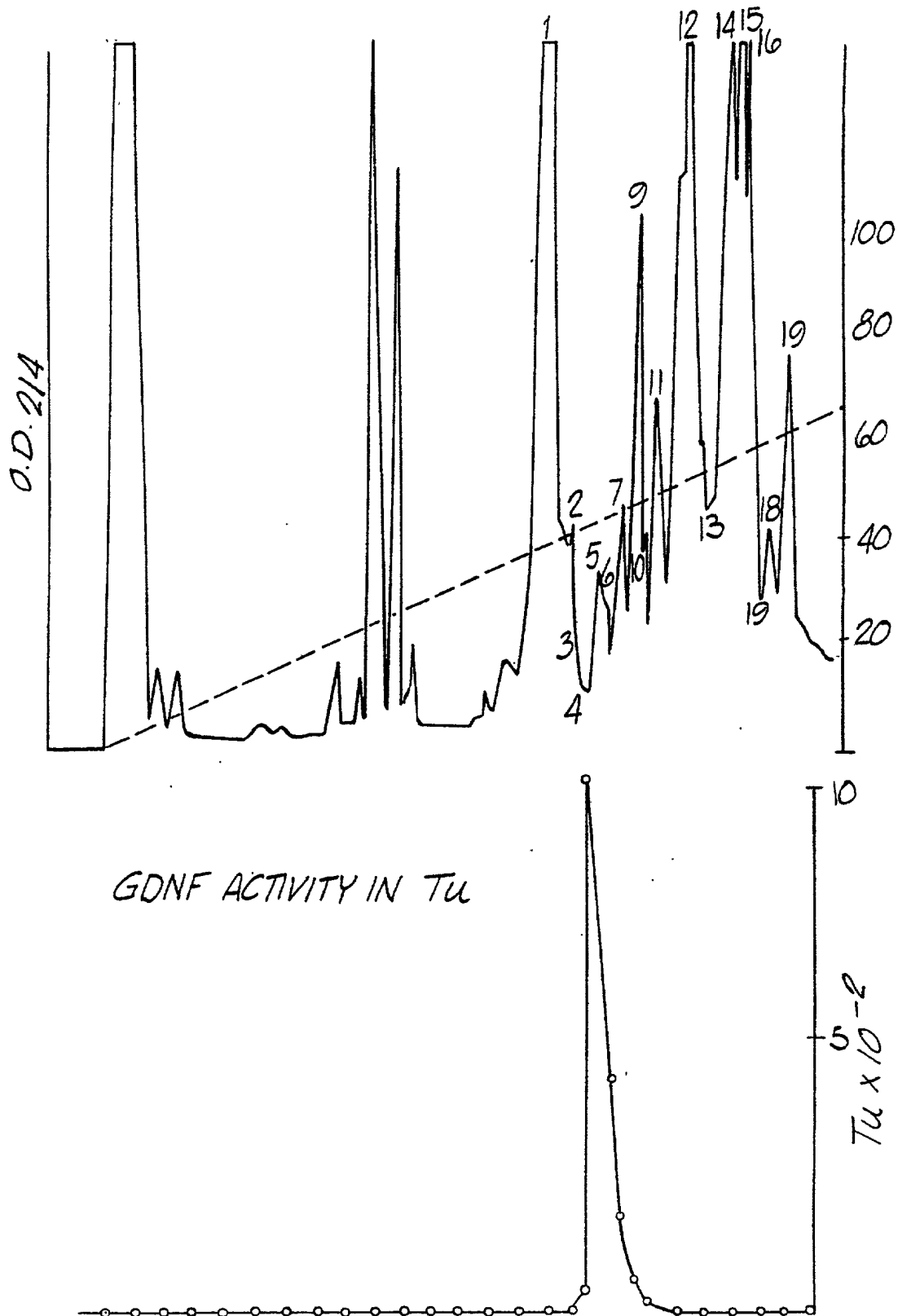


FIG. 3

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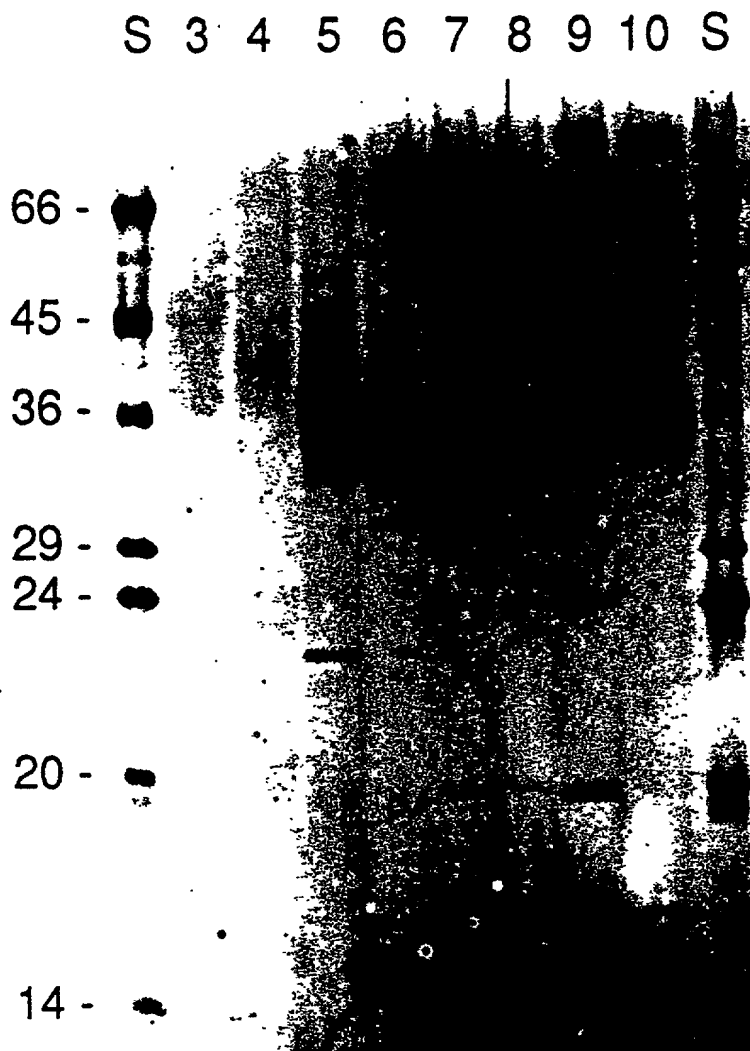


FIG. 4

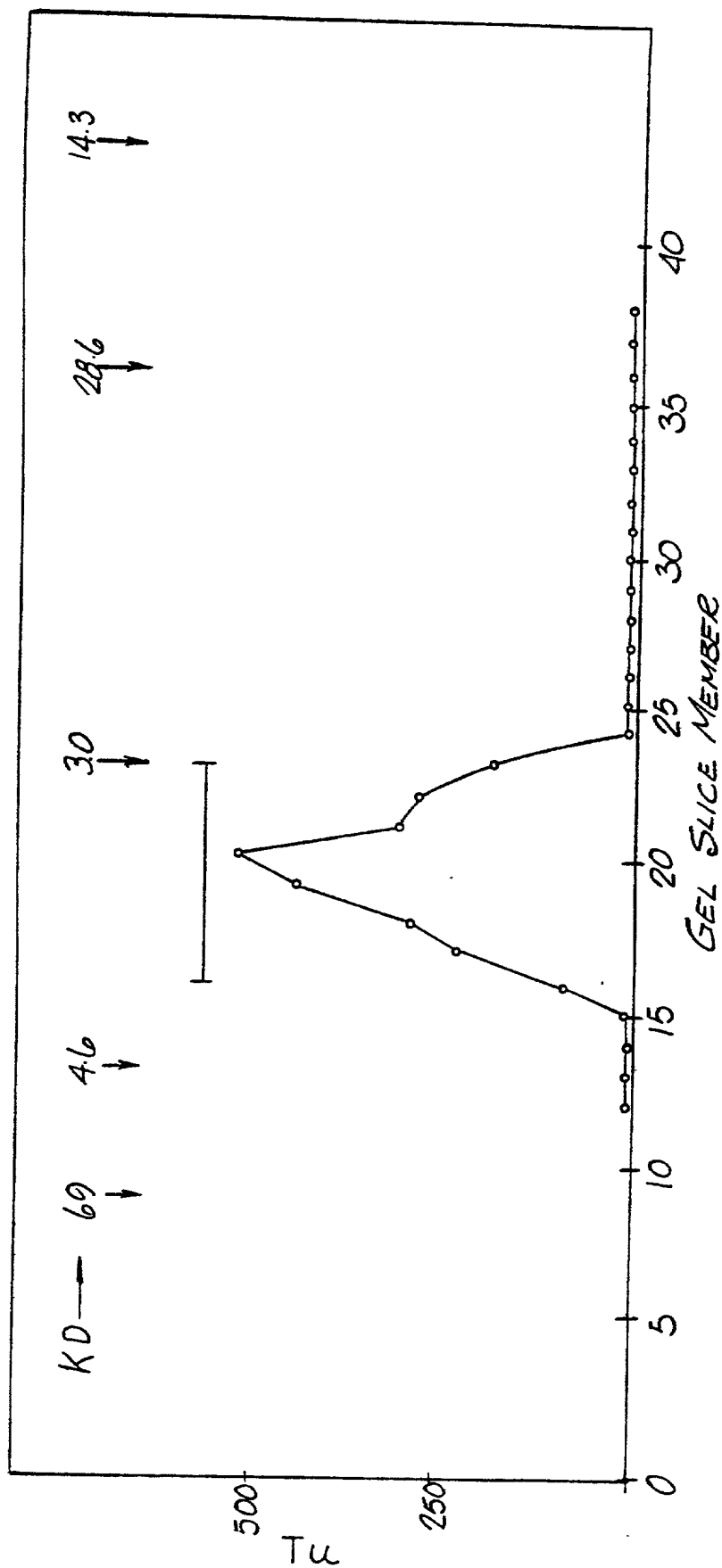


FIG.5

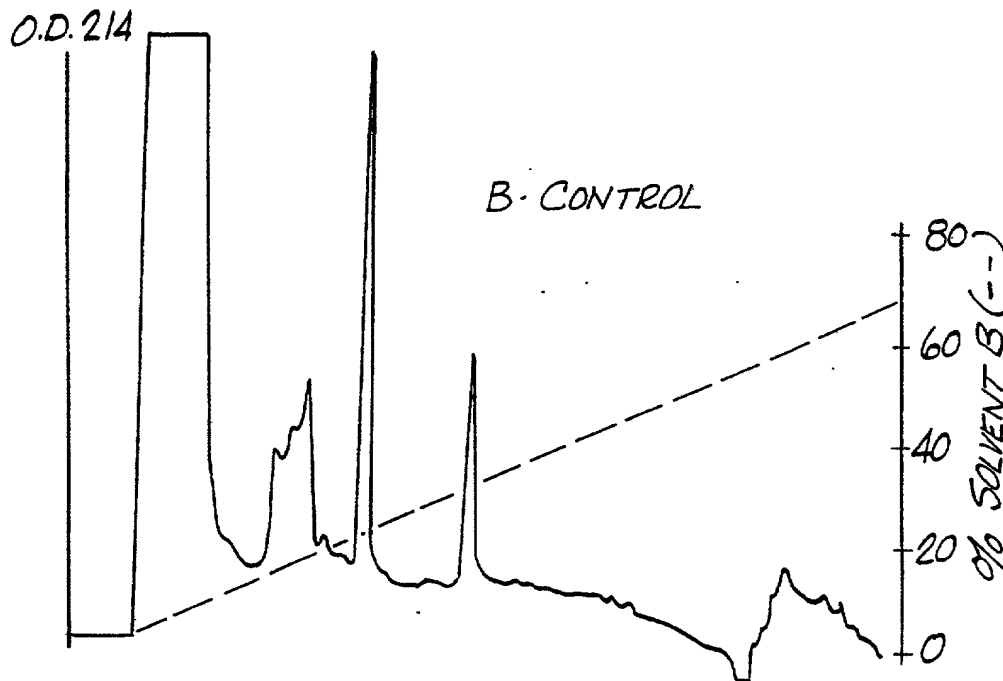
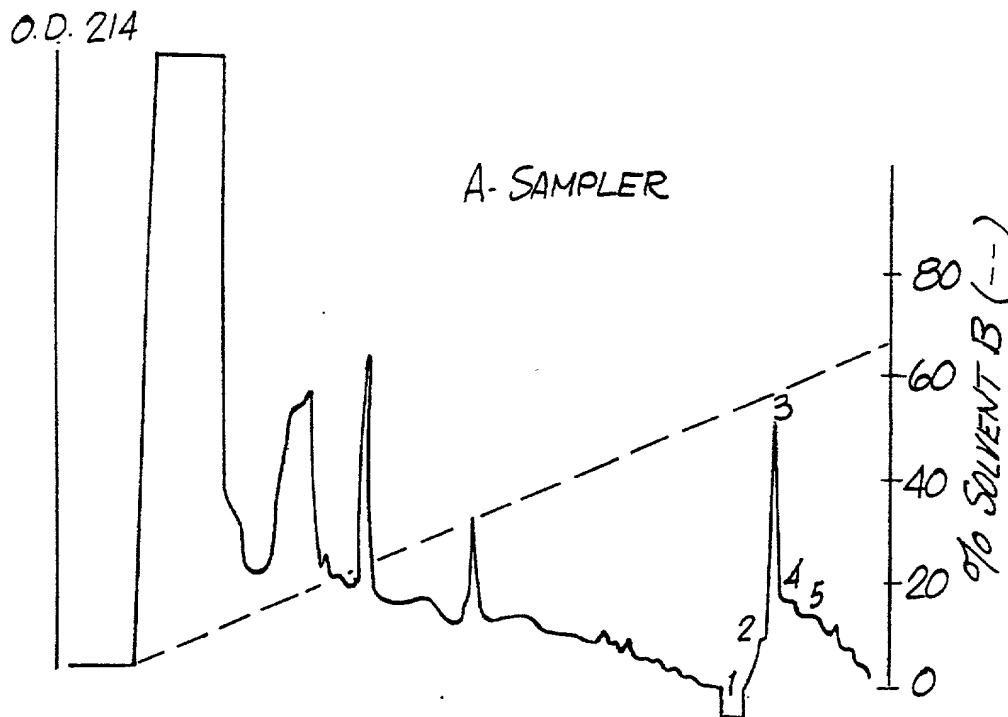


FIG. 6

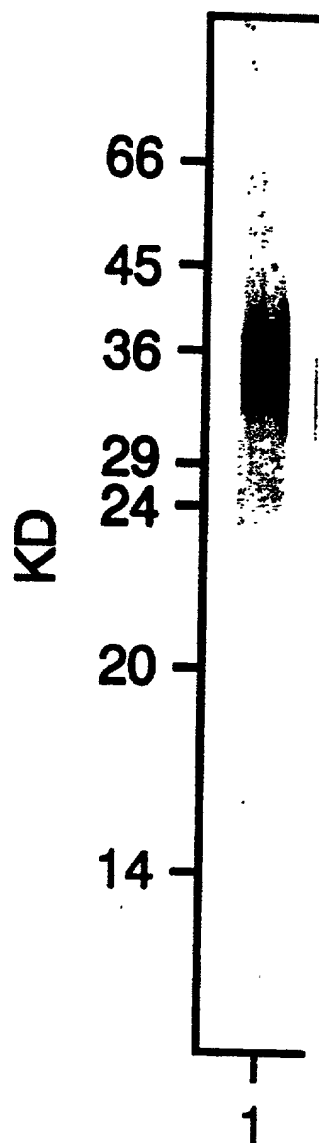


FIG.7

FIGURE 8

Amino-terminal sequence of GDNF

(Ser)-Pro-Asp-Lys-Gln-Ala-Ala-Ala-Leu-Pro-Arg-Arg-Glu-
(Arg)-Asn-(*)-Gln-Ala-Ala-Ala-(Ser)-Pro-(Asp)-(Asn)

* no residue could be unequivocally identified in this position
amino acid residues in parenthesis are those identified with less certainty

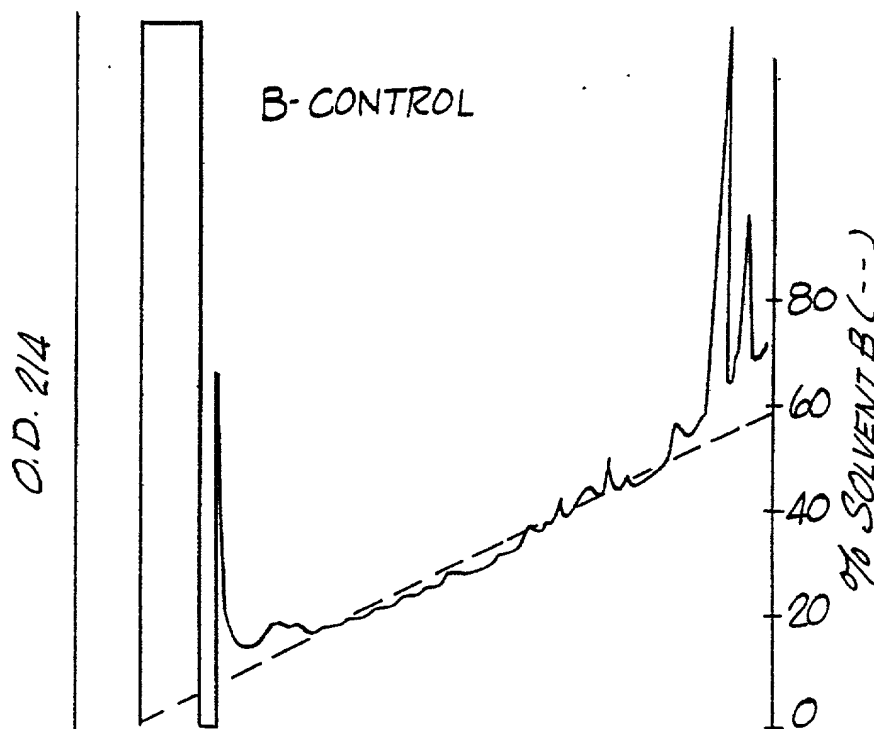
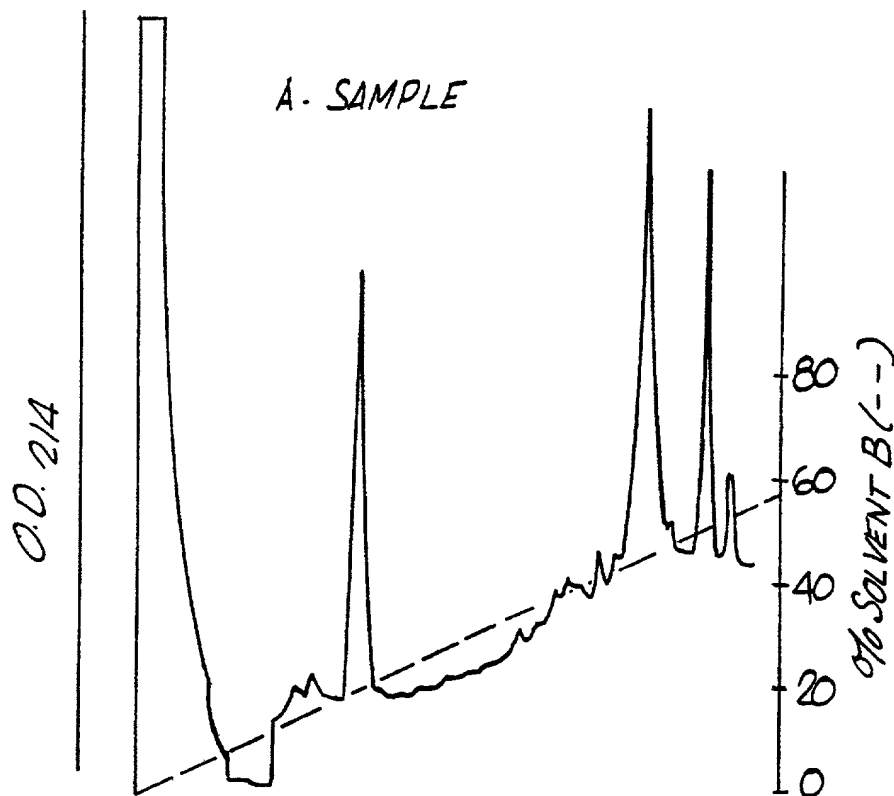


FIG.9
SUBSTITUTE SHEET

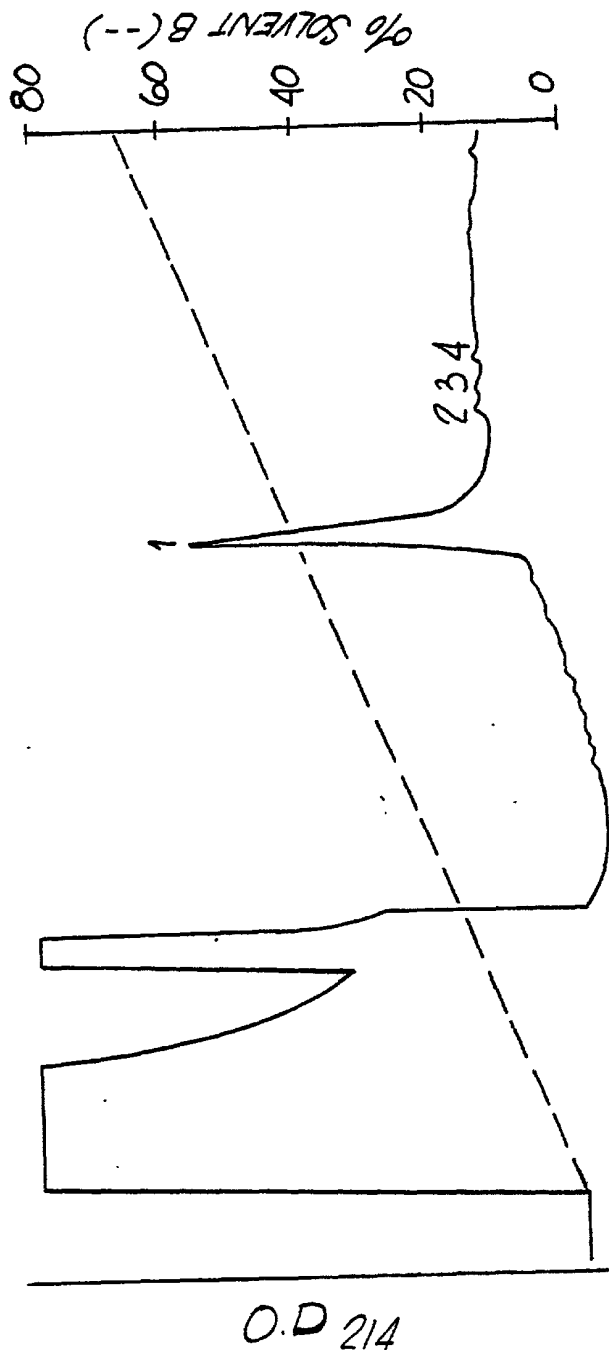


FIG.10

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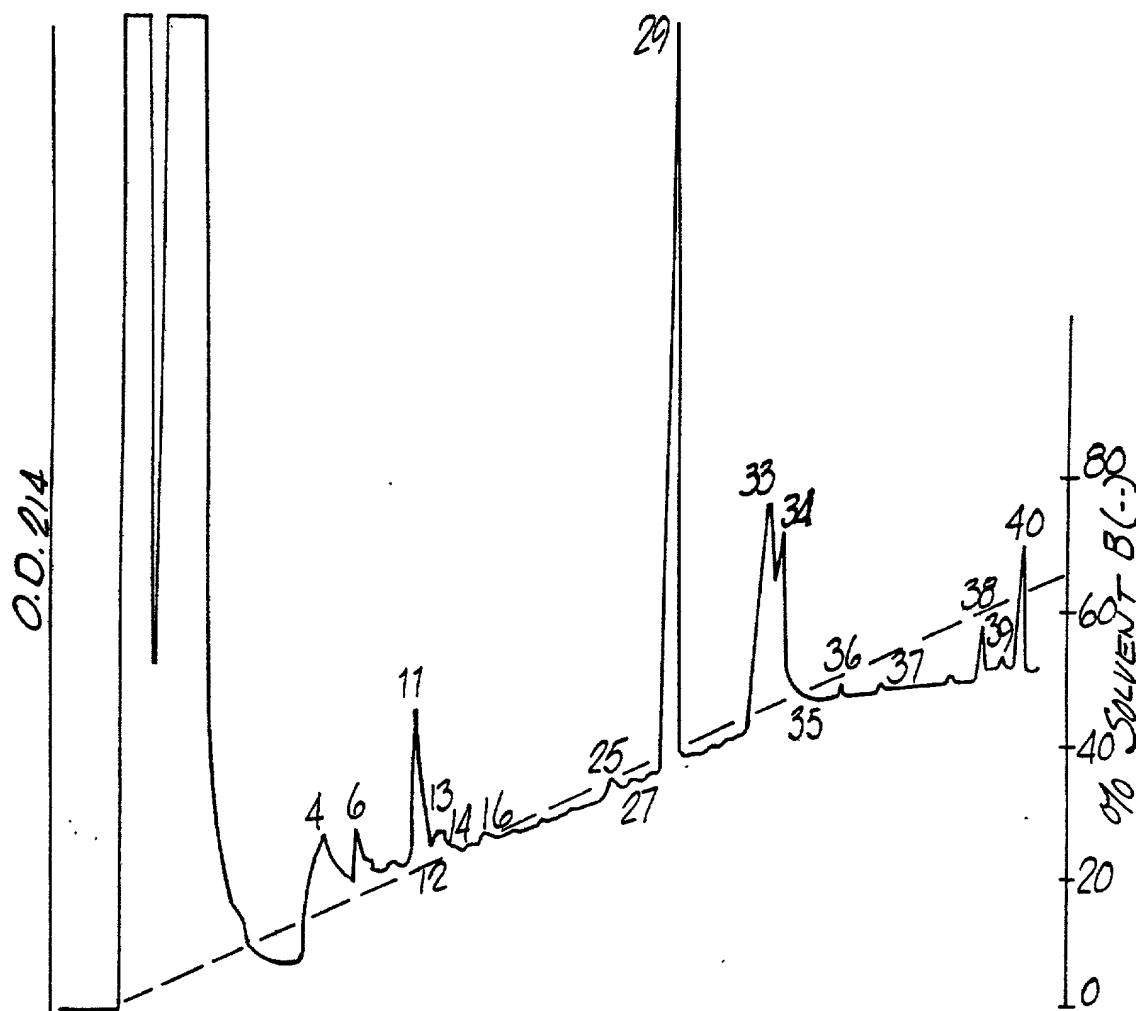


FIG. II

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FIGURE 12

An internal sequence of the GDNF

Asp-(Lys/Gln)-Ile-Leu-Lys-Asn-Leu-(Gly)*-(Arg)-(Val)-
(Arg)-(Arg)-Leu

*Amino acid residues placed in parentheses are ones
identified with less certainty.

34
 CCCCCGGGCT GCAGGAATTC GGGG ¹ GTC TAC TAC GGA GAC CCG ATC CGA GGT GCC GCC GCC
 V Y G D R I R G A A A

 88
 GGA CCG GAC TCT AAG ATG AAG TTA TGG GAT GTC GTG GCT GTC TGC CTG GTG TTG
 G R D S K M K L W D V V A V C L V L
 *
 142
 CTC CAC ACC GCG TCT GCC TTC CCG CTG CCC GCG GGT AAG AGG CTT CTC GAA GCG
 L H T A S A F P L P A G K R L L E A
 196
 CCC GCC GAA GAC CAC TCC CTC GGC CAC CCG CGC CGC TTC GCG CTG ACC AGT
 P A E D H S L G H R R V P F A L T S
 250
 GAC TCC AAT ATG CCC GAA GAT TAT CCT GAC CAG TTT GAT GAC GTC ATG GAT TTT
 D S N M P E D Y P D Q F D D V M D F
 304
 ATT CAA GCC ACC ATC AAA AGA CTG AAA AGG TCA CCA GAT AAA CAA GCG GCG GCA
 I Q A T I K R L K R S P D K Q A A A
 358
 CTT CCT CGA AGA GAG AGG AAC CCG CAA GCT GCA GCT GCC GCT CCA GAG AAT TCC
 L P R R E R N R Q A A A A S P E N S

FIG.13

412
 AGA GGG AAA GGT CGC AGA GGC CAG AGG GGC AAA AAT CGG GGG TGC GTC TTA ACT
 R G K G R G Q R G K N R G C V L T

466
 GCA ATA CAC TTA AAT GTC ACT ACT GAC TTG GGT TTG GGC TAC GAA ACC AAG GAG GAA
 A I H L N V T D L G L G Y E T K E E

520
 CTG ATC TTT CGA TAT TGT TGT TCC TCC TGT GAA GCG GCC GAG ACA ATG TAC GAC
 L I F R Y C S S G S C E A A E T M Y D

574
 AAA ATA CTA AAA AAT CTG TCT TCT CGA AGT AGA AGG CTA ACA AGT GAC AAG GTA GGC
 K I L K N AAT CTG TCT TCT CGA AGT AGA AGG CTA ACA AGT GAC AAG GTA GGC

628
 CAG GCA TGT TGC AGG CCG GTC GCC TTT GAC GAC CTG TCG TTT TTA GAC GAC
 Q A C C R P V A F D D D L S F L D D

682
 AGC CTG GTT TAC CAT ATC CTA AGA AAG CAT TCC GCT AAA CGG TGT GGA TGT ATC
 S L V Y H I L R K H S A K R C G C I

745
 TGA CCTGGCTCC AGAGACTGCT GTGTAATGCA TTCTGTCTAC AGTGCGAAGA AAGGACCAA

815
 GGTGCCAGG AATATTTGCC CCAGAAAGGA AGATAAGGAC CAAGAAGGCA GAGGCAGAGG CGAAGAAGA

875
 AGAAGAAAG AAGACGAAG GCAGCCATCT GTGGGAGCCT GTAGAAGGAG GCCCAGCTAC AG

FIG 13 (CONT)

FIGURE 14

S	P	D	K	Q	A	A	Q	A	A	A	A	S	P	E	N	S	T	E	D	G	D	I
L	P	R	R	E	R	N	R	G	K	N	N	G	C	V	L	L	R	E	Y	V	D	C
R	G	K	G	R	R	G	Q	G	L	G	L	E	T	X	K	E	T	X	H	K	L	G
A	I	H	L	N	V	T	D	C	E	C	E	R	R	D	T	A	T	T	Y	D	F	C
L	I	F	R	Y	C	S	G	S	R	R	A	L	D	S	S	A	S	E	E	S	S	R
K	I	L	K	N	L	S	R	S	R	C	R	D	D	R	S	T	L	A	T	L	K	K
Q	A	C	C	R	P	V	A	F	D	D	D	S	S	K	H	S	A	A	A	A	A	A
S	L	V	Y	H	I	L	R	K	H	S	R	S	S	K	L	A	A	A	A	A	A	A

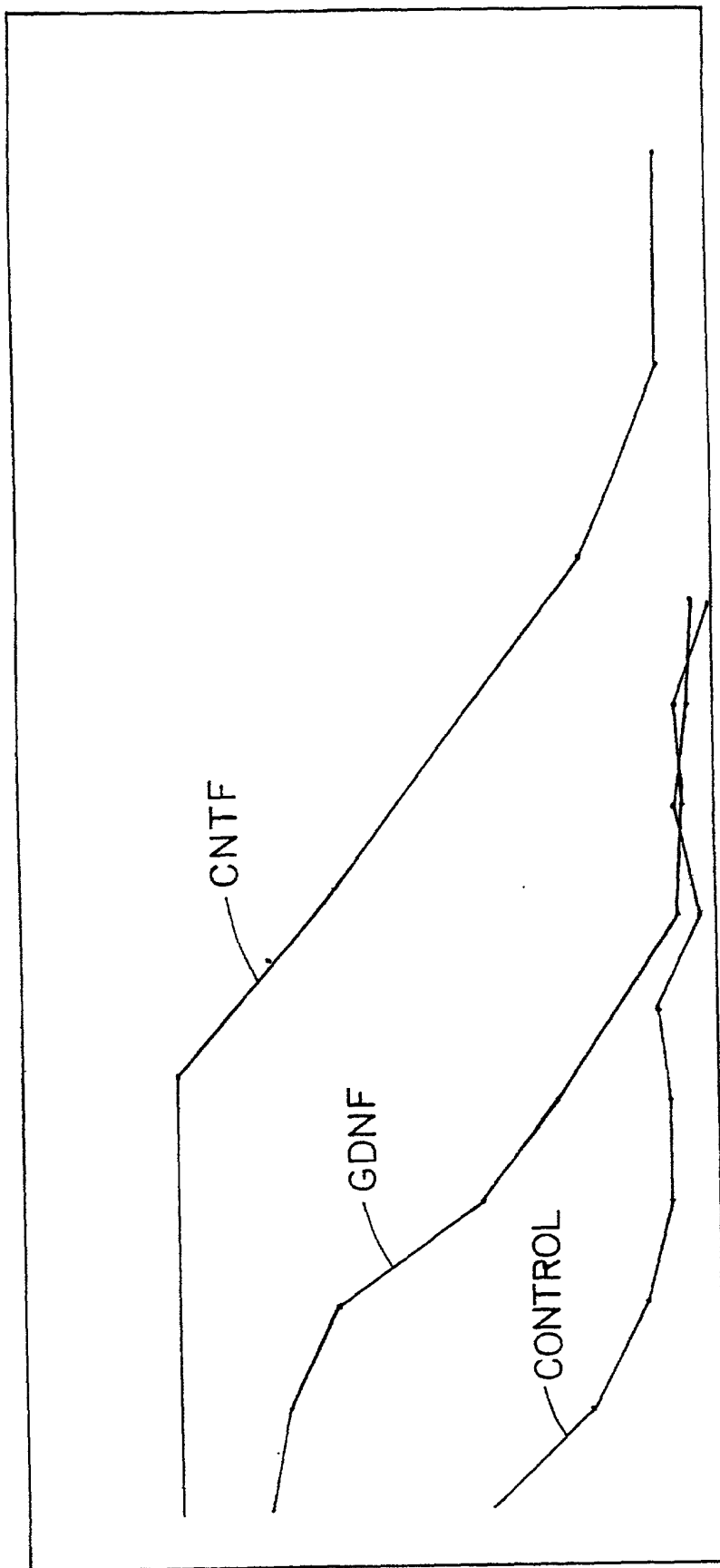


FIG.15

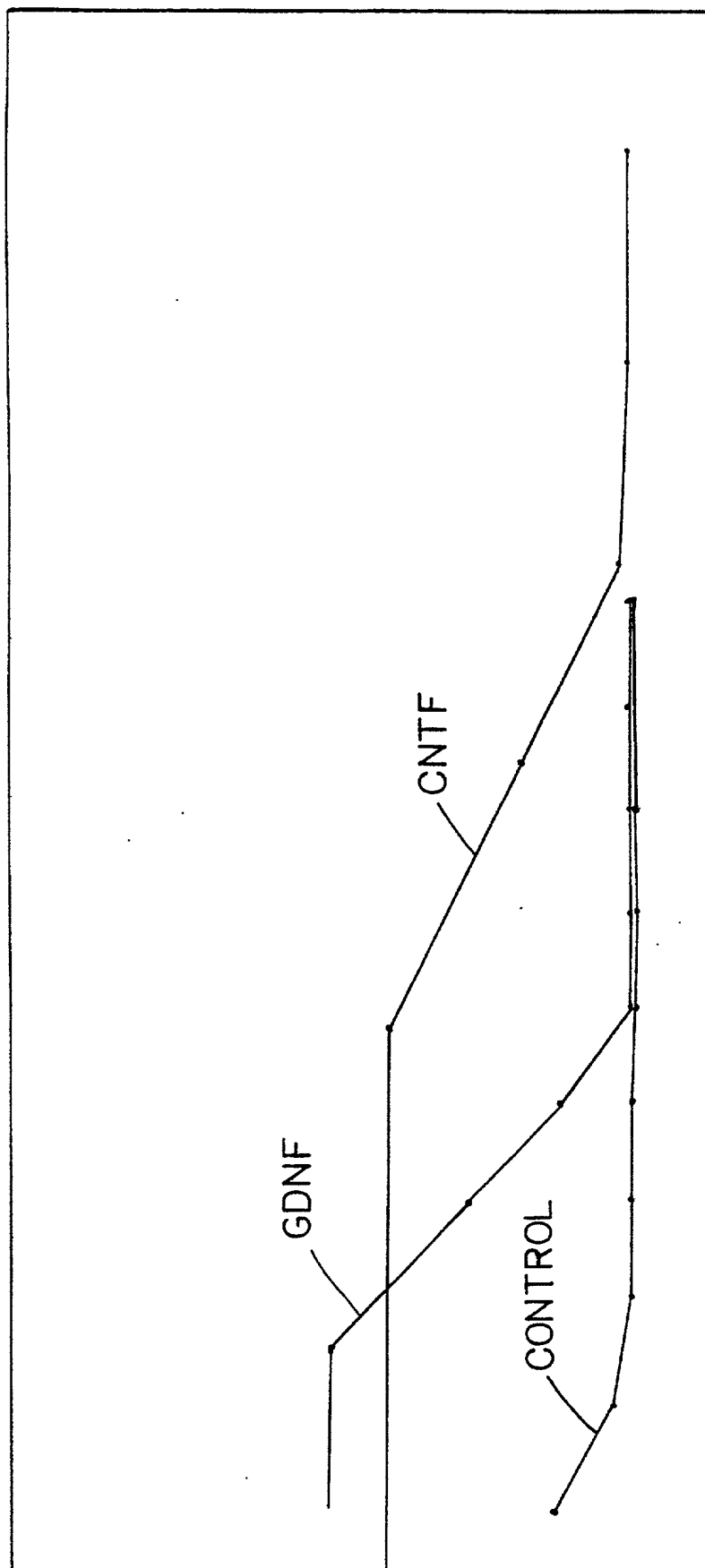


FIG.16

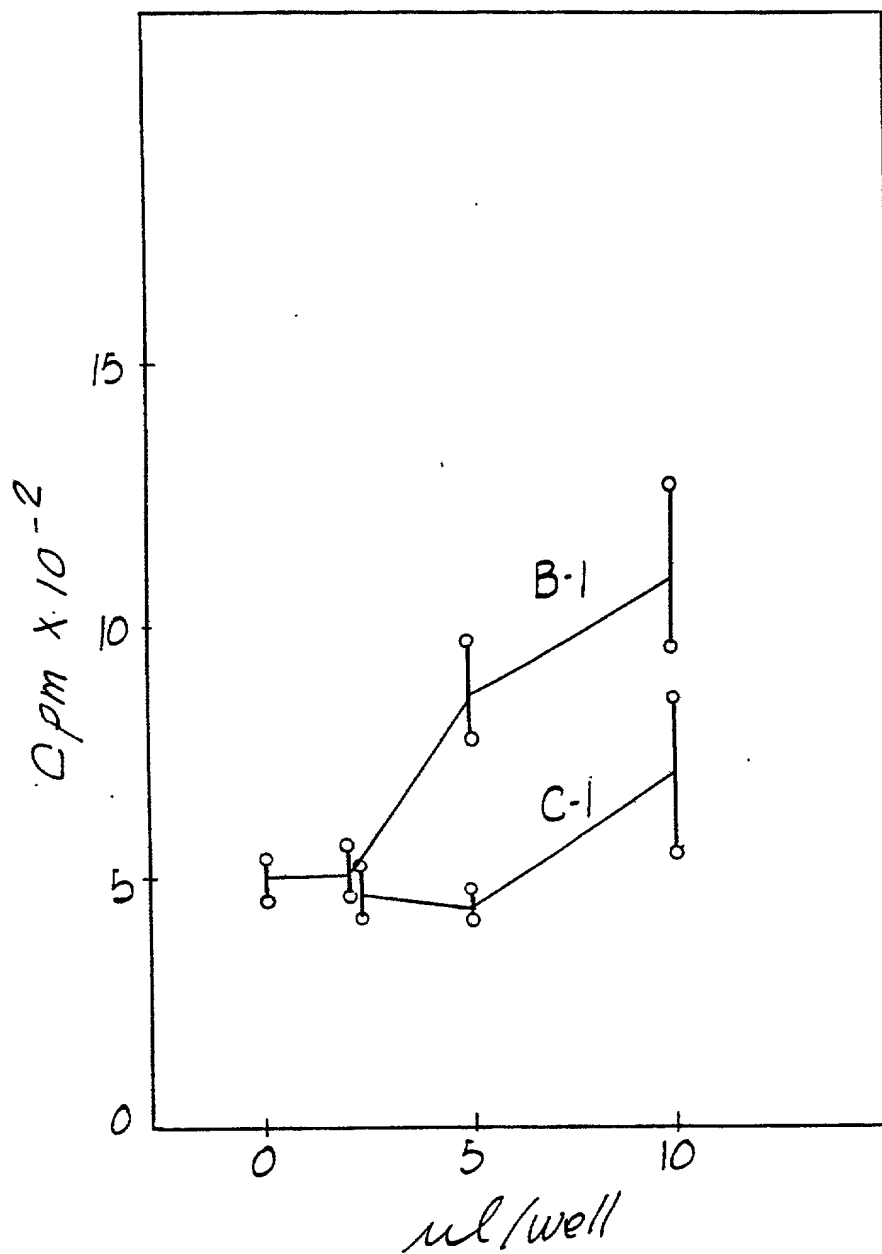


FIG.17

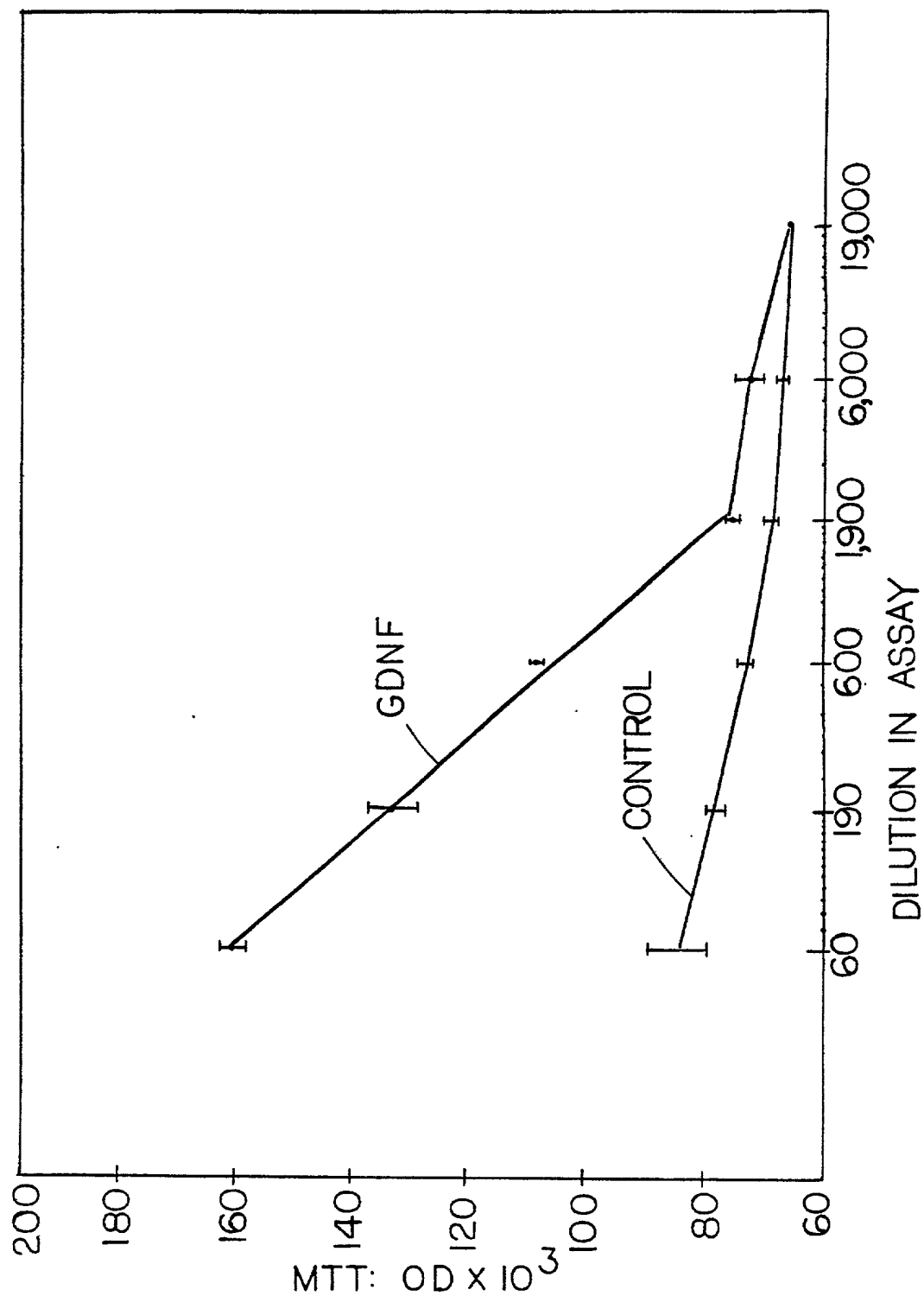


FIG.18

SEQUENCE LISTING

68	attttctotctttctttttgaacag	CA	AAT	ATG	CCA	GAG	GAT	CCT	GAT	CAG	TTC	GAT	GAT	GTC	ATG
			N	M	P	E	D	Y	P	Q	F	D	D	V	M
131															
	GAT	TTT	ATT	CAA	GCC	ACC	ATT	AAA	AGA	CTG	AAA	AGG	TCA	CCA	GAT
	D	F	I	Q	A	T	I	K	R	L	K	R	S	P	D
194															
	CCT	AGA	AGA	GAG	CGG	AAT	CGG	CAG	GCT	GCA	GCT	GCC	AAC	CCA	GAG
	P	R	R	E	R	N	R	Q	A	A	A	A	N	P	E
257															
	CGG	AGA	GGC	CAG	AGG	GGC	AAA	AAC	CGG	GGT	TGT	GTC	TTA	ACT	GTC
	R	R	G	Q	R	G	K	N	R	G	C	V	L	T	A
320															
	GAC	TTG	GGT	CTG	GGC	TAT	GAA	ACC	AAG	GAG	GAA	CTG	ATT	TTT	AGG
	D	L	G	L	G	Y	E	T	K	E	E	L	I	F	R
383															
	GAT	GCA	GCT	GAG	ACA	ACG	TAC	GAC	AAA	ATA	TTG	AAA	AAC	TTA	TCC
	D	A	A	E	T	T	Y	D	K	I	L	K	N	L	S
446															
	AGT	GAC	AAA	GTA	GGG	CAG	GCA	TGT	TGC	AGA	CCC	ATC	GCC	TTT	GAT
	S	D	K	V	G	Q	A	C	C	R	P	I	A	F	D

FIG.19

509
 GAT GAT AAC CTG GTT TAC CAT ATT CTA AGA AAG AAG CAT TCC GCT AAA AGG TGT GGA TGT ATC TGA
 D D N L V Y H I L R K H S A K R C C I .
 562

ctccggctccagagactgctgtgtattgcattcctctgtacagtgcaaaagaag

FIG.19 (CON'T)

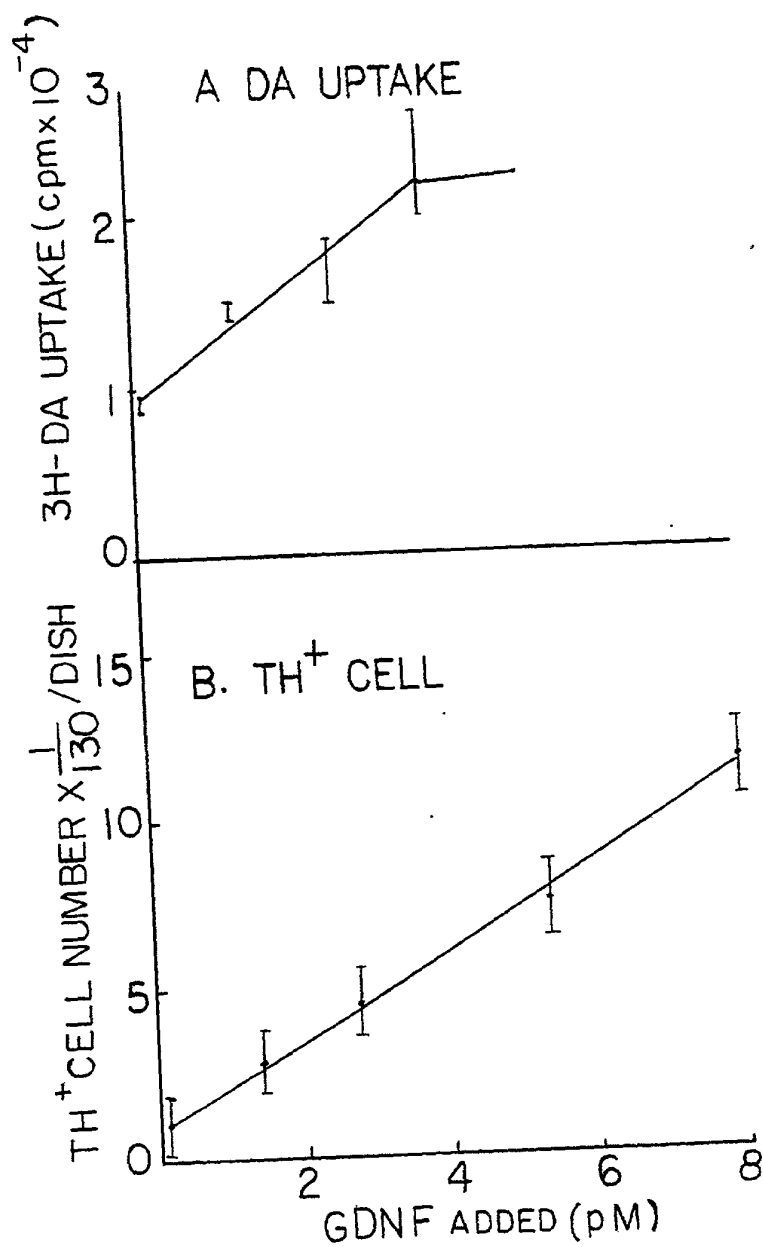


FIG. 20

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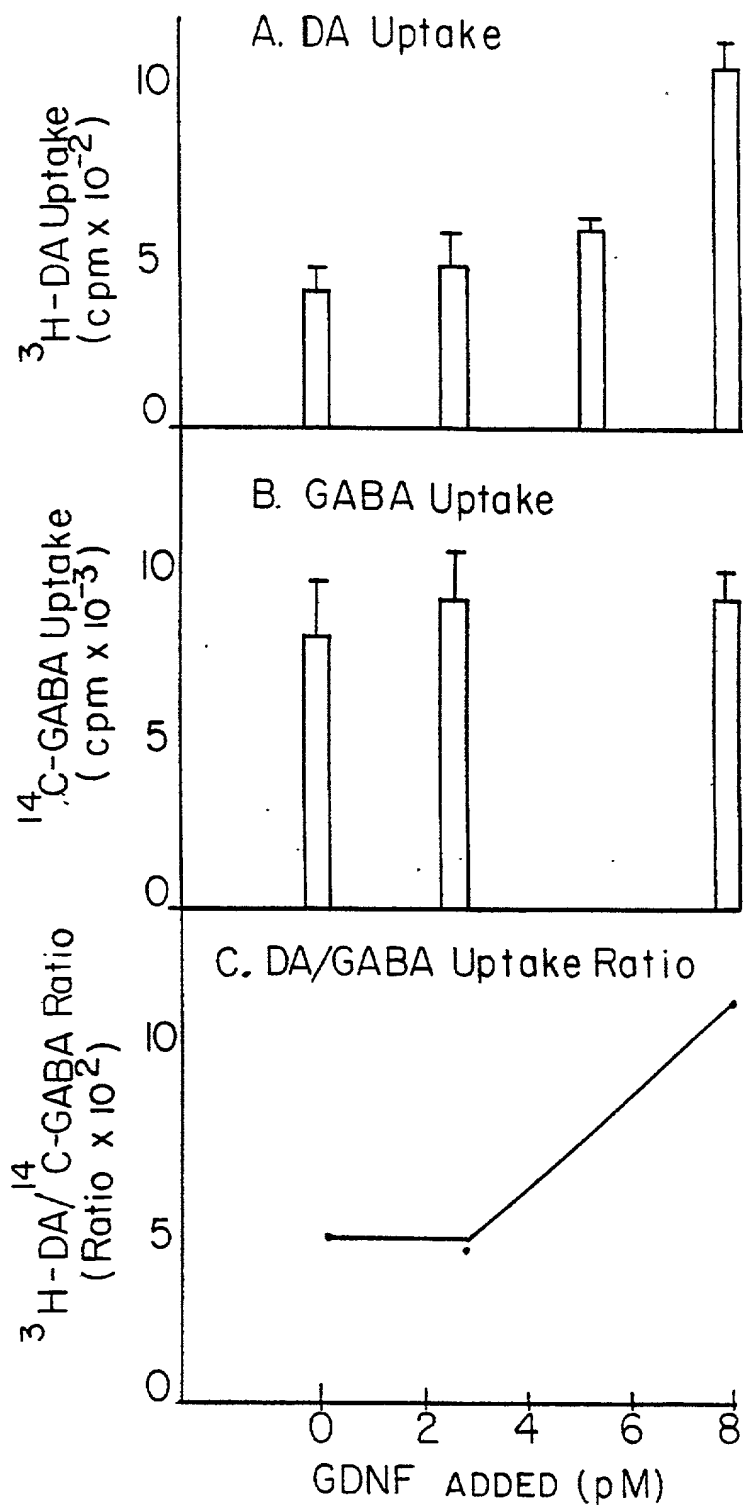


FIG.21

SUBSTITUTE SHEET

4

97

151

205

223

FIG. 22

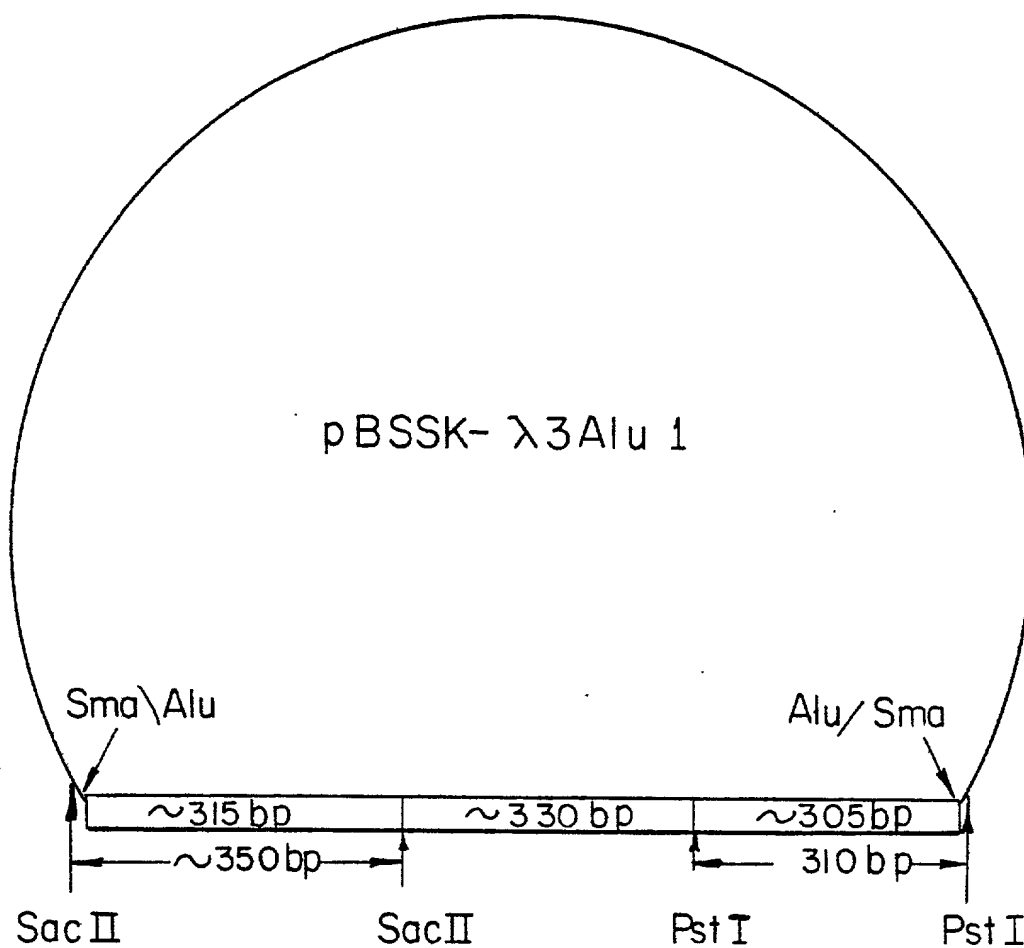


FIG.23

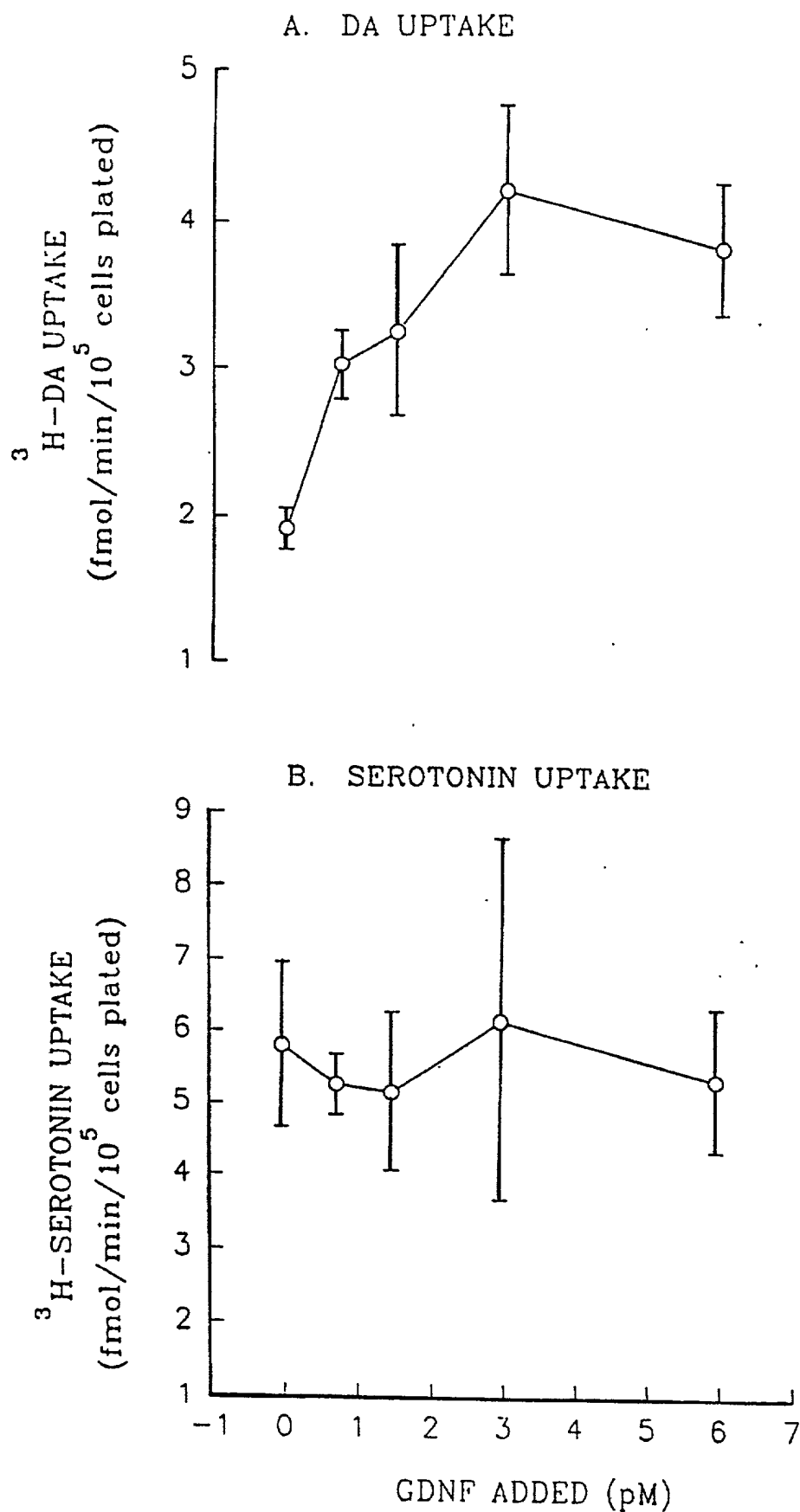


FIG.24

SUBSTITUTE SHEET

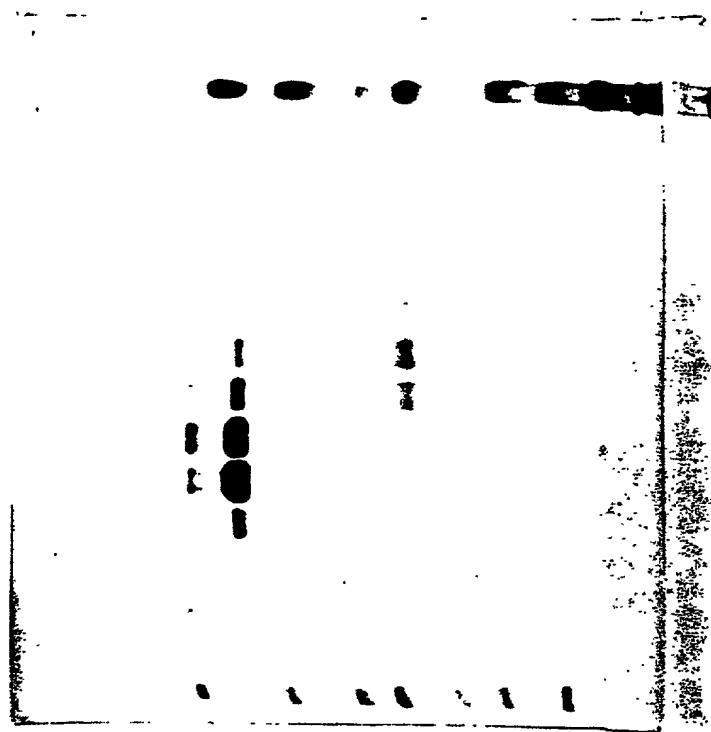


FIG.25

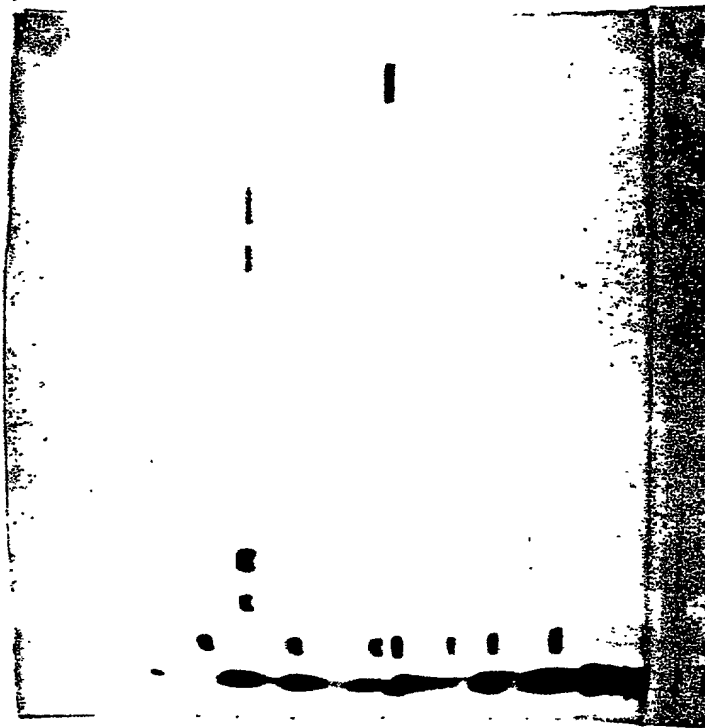


FIG.26

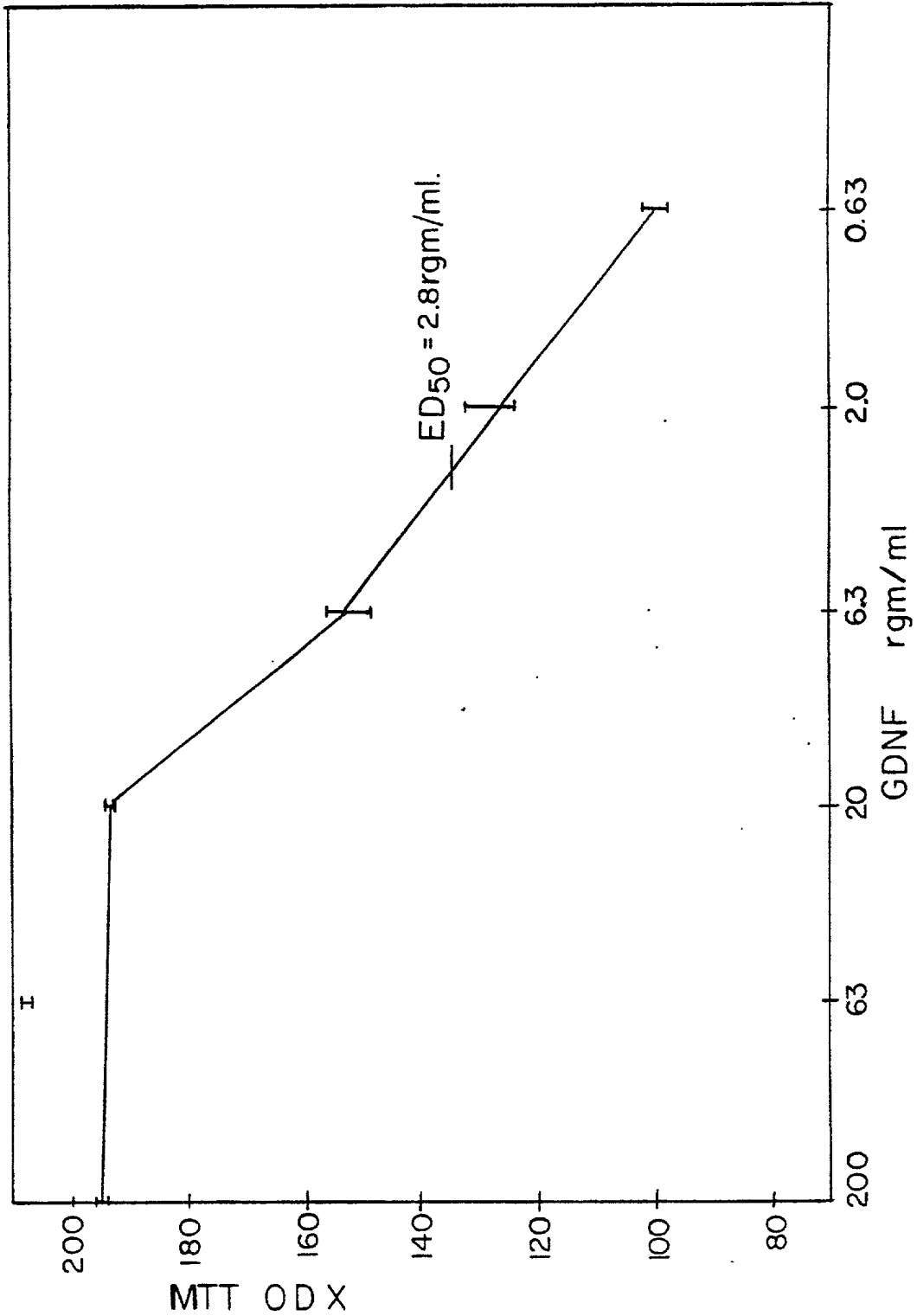


FIG.27

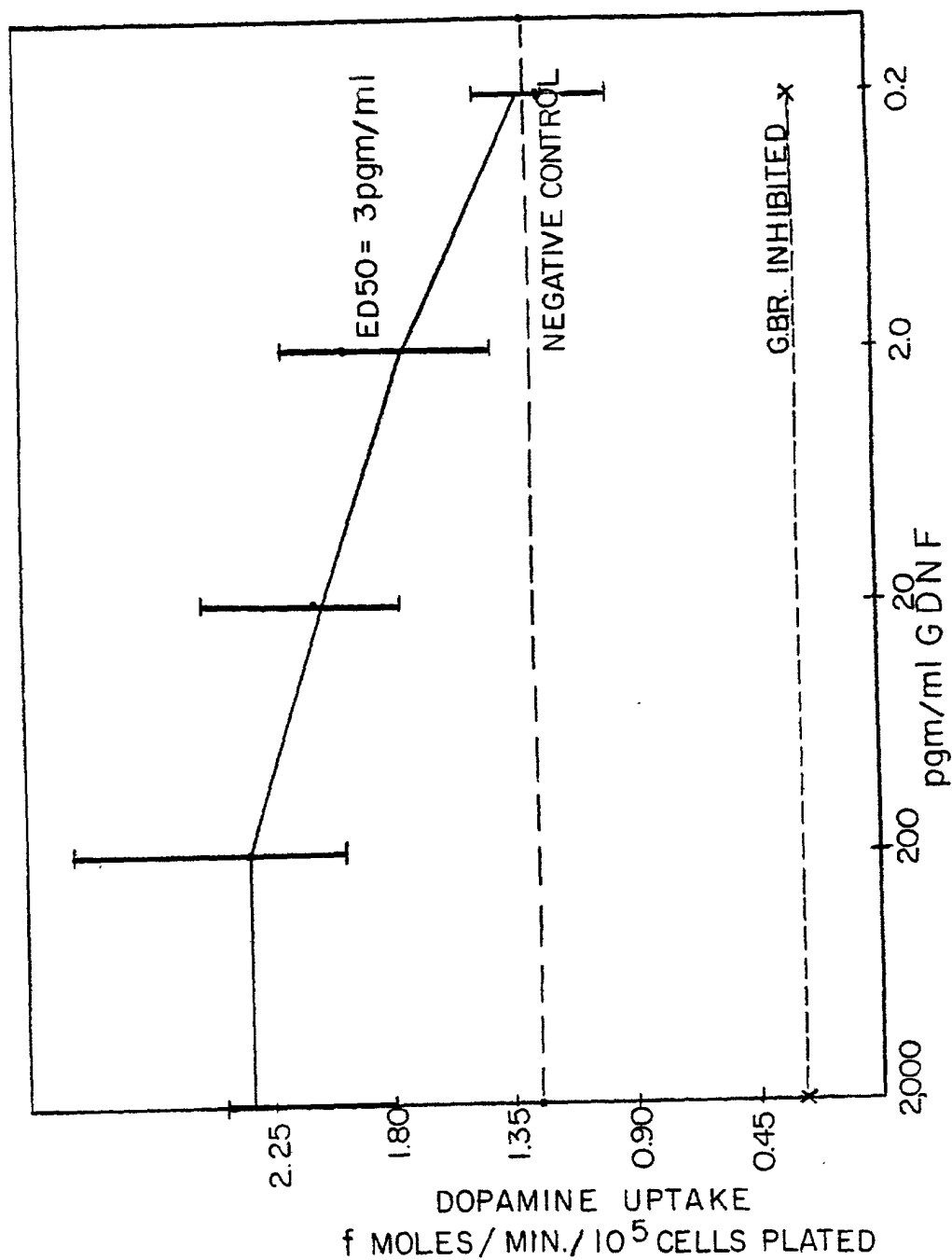


FIG. 28